PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

Claims 1 – 15 (Cancelled)

16. (New) A method of noise estimation, comprising:

decoding incoming information units to generate corresponding bits;

encoding said corresponding bits to generate recovered information units;

determining a vector product of said incoming information units and said recovered information units;

determining a difference between a first symbol spaced near a second symbol within said vector product; and

using said difference to define an expected value of a non-orthogonal noise portion of said incoming information units.

17. (New) The method of Claim 16, further comprising:

arranging said recovered information units in an order corresponding to the order in which said incoming information units were transmitted.

18. (New) The method of Claim 17, further comprising:

determining a data rate at which said incoming information units were transmitted.

19. (New) The method of Claim 18, further comprising:

determining a signal quality of said incoming information units based upon said expected value of said non-orthogonal noise portion.

20. (New) The method of Claim 19, further comprising:

requesting a change in transmission power based upon said expected value of said non-orthogonal noise portion.

21. (New) A receiver, comprising:

means for decoding incoming information units to generate corresponding bits;

means for encoding said corresponding bits to generate recovered information units;

means for determining a vector product of said incoming information units and said recovered information units;

means for determining a difference between a first symbol spaced near a second symbol within said vector product; and

means for determining an expected value of a non-orthogonal noise portion of said incoming information units based on said difference.

22. (New) The receiver of Claim 21, further comprising:

means for arranging said recovered information units in an order corresponding to the order in which said incoming information units were transmitted.

23. (New) The receiver of Claim 21, further comprising:

means for determining a data rate at which said incoming information units were transmitted.

24. (New) The receiver of Claim 21, further comprising:

means for determining a signal quality of said incoming information units based upon said expected value of said non-orthogonal noise portion.

25. (New) The receiver of Claim 21, further comprising:

means for requesting a change in transmission power based upon said expected value of said non-orthogonal noise portion.

26. (New) A receiver, comprising:

a decoder that generates recovered data bits based on incoming information units;

an encoder that generates encoded information units based on said recovered data bits;

a vector product block that generates a vector product based on said encoded information units and said incoming information units;

a difference block that receives said vector product block and generates differences between at least a first symbol spaced near a second symbol; and

a noise estimation block that determines a statistical characteristic of said differences.

27. (New) The receiver of Claim 26, further comprising:

an interleaver configured to arrange said recovered information units in an order corresponding to the order in which said incoming information units were transmitted.

28. (New) The receiver of Claim 26, further comprising:

a rate decision block configured to determine a rate at which said incoming information units were transmitted.

29. (New) The receiver of Claim 26, further comprising:

a signal quality determination unit configured to determine a signal quality of said incoming information units based upon said statistical characteristic of said differences.

30. (New) The receiver of Claim 26, further comprising:

a power control block configured to request a change in transmission power based upon said statistical characteristic of said difference.